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| APPLICATION NO.                       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---------------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/664,009                            | 09/17/2003  | Toyoharu Hanzawa     | 20-134                  | 3902             |
| 7590 01/21/2005                       |             | EXAMINER             |                         |                  |
| Arnold International                  |             |                      | GRAY, DAVID M           |                  |
| P.O. BOX 129<br>Great Falls, VA 22066 |             |                      | ART UNIT                | PAPER NUMBER     |
| ,                                     |             |                      | 2851                    |                  |
|                                       |             |                      | DATE MAILED: 01/21/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| -  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  |   |  |  |  |  |  |
| Office Action Summary  | 10/664,009  | HANZAWA, TOYOHARU  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | David M Gray  | 2851   |  |  |  |  |
| The MAILING DATE of this communic Period for Reply   | ation appears on the cover sheet wi   | ith the correspondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu  - If the period for reply specified above is less than thirty (30)  - If NO period for reply is specified above, the maximum state  - Failure to reply within the set or extended period for reply when the set or extended period for reply when the set or extended period for reply within the set or extended period for reply within the set or extended period for reply when the set or extended period for reply within the set or extended period for repl | CATION. f 37 CFR 1.136(a). In no event, however, may a r<br>nication. days, a reply within the statutory minimum of thin<br>utory period will apply and will expire SIX (6) MON<br>fill, by statute, cause the application to become AE | reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed  | on 17 September 2003.   |  |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  |   |  |  |  |  |  |
| · <u> </u>   |   |  |  |  |  |  |
| closed in accordance with the practice   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4) Claim(s) 1-16 is/are pending in the ap  | 4)⊠ Claim(s) <u>1-16</u> is/are pending in the application.   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5)⊠ Claim(s) <u>3,10-13 and 16</u> is/are allowe   | ⊠ Claim(s) <u>3,10-13 and 16</u> is/are allowed.  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1,2,4 and 5</u> is/are rejected.   | ☑ Claim(s) <u>1,2,4 and 5</u> is/are rejected.  |  |  |  |  |  |
| 7) Claim(s) <u>6-9,14 and 15</u> is/are objected   | ☑ Claim(s) <u>6-9,14 and 15</u> is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restricti   | on and/or election requirement.   |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9)☐ The specification is objected to by the  | Examiner.   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>17 September</u>   | 10)⊠ The drawing(s) filed on <u>17 September 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |  |  |  |  |  |
| Applicant may not request that any object  | ion to the drawing(s) be held in abeyar   | nce. See 37 CFR 1.85(a).   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to  | by the Examiner. Note the attached  | d Office Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim fo<br>a)⊠ All b)☐ Some * c)☐ None of:<br>1.⊠ Certified copies of the priority d   |   | ; 119(a)-(d) or (f).   |  |  |  |  |
| <ol><li>Certified copies of the priority d</li></ol>   | ocuments have been received in A  | pplication No  |  |  |  |  |
| <ol><li>Copies of the certified copies of</li></ol>  | f the priority documents have been  | received in this National Stage  |  |  |  |  |
| application from the Internation   |   |  |  |  |  |  |
| * See the attached detailed Office action  | for a list of the certified copies not  | received.  |  |  |  |  |
| Au. 1 4 >  | ·   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   | <b>∧</b> □  | Diversion (DTO 442)  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PT  | O-948) Paper No(s   | Summary (PTO-413)<br>s)/Mail Date  |  |  |  |  |
| <ol> <li>Information Disclosure Statement(s) (PTO-1449 or P<br/>Paper No(s)/Mail Date <u>9-17-03</u>.</li> </ol>   |   | nformal Patent Application (PTO-152)<br>   |  |  |  |  |

#### Claim Objections

Claim 8 is objected to because of the following informalities: the claimed "the image rotator" lacks proper antecedent basis in the claim. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami in view of Howes.

Regarding claim 1, Minami discloses a "photographic apparatus [7] for use with a stereoscopic microscope [1] having at least two observation light paths [3, 3'] for observing at least two images having parallax, said photographic apparatus using a light flux that has been split from one of the observation light paths [3'], said photographic apparatus comprising: at least two image detecting elements [11, 12], each having an image receiving surface; a connecting part that is connectable to the stereoscopic microscope [22]; a beam splitter [Minami differs from the claimed invention in that Minami uses a movable mirror 18] that is positioned in an optical path between the connecting part and the at least two image receiving surfaces; and an image relay optical system that is positioned in each light flux following said beam splitter [19, 19' in figure 5 or 28, 29 in figure 6], each image relay optical system relaying an intermediate image that is formed in each light flux following said beam splitter to a respective one of the at least two image receiving surfaces [lenses 19, 19' are disclosed as relay lenses and lenses 28, 29

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are disclosed as image forming lenses, thus by definition these lenses relay an intermediate image]." The limitations of claim 2 are similarly read on Minami.

Howes teaches the equivalence of a movable mirror and a prism in a photograph system for a stereoscopic microscope. It would have been obvious to one of ordinary skill at the time of applicant's invention to substitute one known equivalent for another. One would have been motivated to select the beam splitter for the benefit of reducing moving parts subject to failure.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami in view of Howes as applied to claim1 above, and further in view of Feinbloom.

The modified Minami differs from the claimed invention as Minami does not specify the magnification of the optical systems 19, 19, 28 or 29.

Feinbloom teaches that when providing a photographic apparatus for a stereo microscope, the apparatus must provide both optical and physical coupling for the selected cameras.

Feinbloom teaches that the magnification of the optical systems in the photographic apparatus should be selected such that the relayed image has a proper size relative to the size of the image plane of the selected camera. Thus it would have been obvious to one of ordinary skill to provide the necessary magnification for the system as a whole, including the magnifications set forth in the claims.

## Allowable Subject Matter

Claims 3, 10-13 and 16 are allowed.

Claims 6-9, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not disclose or suggest the "image relay optical system" including "a pupil relay lens" and "a Gaussian-type lens system" in combination with the remaining claim elements as set forth in claims 6 and 7.

The prior art does not disclose or suggest an "image rotator" in combination with the remaining claim elements as set forth in claims 8, 9, 14 and 15.

The prior art does not disclose or suggest "a first beam splitter" and "a second beam splitter" in combination with the remaining claim elements as set forth in claims 3, 10-13 and 16.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Gray whose telephone number is 571-272-2119. The examiner can normally be reached on M-T 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David M Gray Primary Examiner

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